



03-20-03

1647

Express Mail No.: EL 501 759 533 US

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application of: Schwab et al.

Confirmation No.:

Application No.: U.S. Patent Application  
09/830,972; national stage of  
PCT/US99/26160 filed November  
5, 1999

Group Art Unit: 1647

Filed: May 2, 2001

Examiner: To be assigned

For: NUCLEOTIDE AND PROTEIN  
SEQUENCES OF NOGO GENES AND  
METHODS BASED THEREON

Attorney Docket No.: 10200-003-999

TECH CENTER 1600/2900

MAR 24 2003

RECEIVED

## INFORMATION DISCLOSURE STATEMENT UNDER 37 C.F.R. § 1.56

Assistant Commissioner for Patents  
Washington, D.C. 20231

Sir:

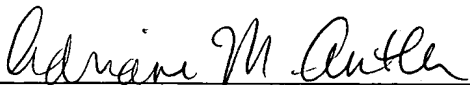
In accordance with the duty of disclosure imposed by 37 C.F.R. § 1.56 and § 1.97 to inform the Patent and Trademark Office of all references coming to the attention of each individual associated with the filing or prosecution of the subject application, which are or may be material to the patentability of any claim of the application, Attorneys for Applicants hereby direct the Examiner's attention to the references listed on the attached revised form PTO-1449 entitled "List of References Cited by Applicant." Legible copies of references AA-HL are submitted herewith. While not to be construed as indicating that the Examiner should not review and consider fully all the listed references, Attorneys for Applicant particularly direct the Examiner's attention to references AA, AB, AK, AJ, AH, AI, BM, BX, HI, and GN.

Applicants respectfully request that the Examiner review the listed references and that the references be made of record in the file history of the application.

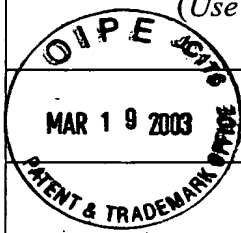
Pursuant to 37 C.F.R. §1.97(b), since this information disclosure statement is being filed before the mailing date of a first Office Action on the merits, no fee is due in connection herewith. However, should the Patent Office determine otherwise, please charge the required fee to Pennie & Edmonds LLP deposit account no. 16-1150; a duplicate of this sheet is enclosed.

Respectfully submitted,

Date: March 19, 2003

 32,605  
Adriane M. Antler (Reg. No.)  
PENNIE & EDMONDS LLP  
1155 Avenue of the Americas  
New York, N.Y. 10036-2711  
(212) 790-9090

Express Mail No.: EL 501 759 533 US

|  |                  |                 |
|--|------------------|-----------------|
| <b>LIST OF REFERENCES CITED BY APPLICANT</b><br><i>(Use several sheets if necessary)</i> | ATTY. DOCKET NO. | APPLICATION NO. |
|  | 10200-003        | 09/830,972      |
|          | APPLICANT:       |                 |
|  | Schwab, Martin   |                 |
|  | FILING DATE      | GROUP           |
|  | May 2, 2001      | 1647            |

RECEIVED  
MAR 24 2003  
TECH CENTER 1600/2900

**U.S. PATENT DOCUMENTS**

| *EXAMINER<br>INITIAL |    | DOCUMENT NUMBER | DATE     | NAME          | CLASS | SUBCLASS | FILING DATE<br>IF<br>APPROPRIATE |
|----------------------|----|-----------------|----------|---------------|-------|----------|----------------------------------|
|                      | AA | 5,250,414       | 10/5/93  | Schwab et al. |       |          |                                  |
|                      | AB | 5,684,133       | 11/4/97  | Schwab et al. |       |          |                                  |
|                      | AC | 6,103,232       | 08/15/00 | Schwab et al. |       |          |                                  |

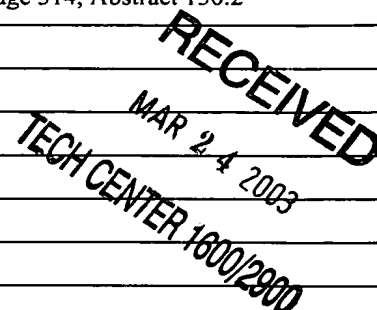
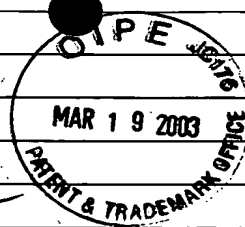
**FOREIGN PATENT DOCUMENTS**

|  |    | DOCUMENT NUMBER | DATE     | COUNTRY | CLASS | SUBCLASS | TRANSLATION |    |
|--|----|-----------------|----------|---------|-------|----------|-------------|----|
|  |    |                 |          |         |       |          | YES         | NO |
|  | AD | EP 046 523 A1   | 3/3/82   | EP      |       |          |             |    |
|  | AE | EP 155 433 A1   | 9/25/85  | EP      |       |          |             |    |
|  | AF | EP 159 289 A1   | 10/23/85 | EP      |       |          |             |    |
|  | AG | EP 233 838 A2   | 8/26/87  | EP      |       |          |             |    |
|  | AH | WO 90/05191     | 5/17/90  | PCT     |       |          |             |    |
|  | AI | WO 93/00427     | 1/7/93   | PCT     |       |          |             |    |
|  | AJ | WO 98/06841     | 2/19/98  | PCT     |       |          |             |    |
|  | AK | WO 98/17687     | 4/30/98  | PCT     |       |          |             |    |
|  | AL | WO 00/31235     | 6/2/2000 | PCT     |       |          |             |    |

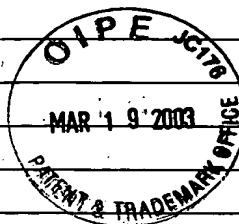
**OTHER REFERENCES** *(Including Author, Title, Date, Pertinent Pages, Etc.)*

|    |  |
|----|--|
| AM | Aguayo et al., 1978, Neurosci. Lett. 9: 97-104                                       |
| AN | Almenoff and Orlowski, 1983, Biochem. 22:590-99                                      |
| AO | Amberger et al., Experientia 47, A2  |
| AP | Bandtlow et al., 1989, Experientia 45(Abstr.): A30                                   |
| AQ | Bandtlow et al., 1996, Eur. J. Biochem. 241:468-475.                                 |
| AR | Bandtlow et al., 1987, Soc. Neurosci. Abstr. 13:1616                                 |
| AS | Bandtlow et al., 1993, Science 259: 80-83.   |
| AT | Bandtlow et al., 1990, Experientia 46, A74.  |
| AU | Bandtlow et al., 1991, Soc. Neurosci. Abstract Vol. 17, no. 2, page 1495, No. 598.11 |
| AV | Barinaga M., 1994, Science 264: 772-774  |
| AW | Bastmeyer et al., 1988, Eur. J. Neurosci., Suppl. 1: 207                             |
| AX | Bastmeyer et al., 1988, Soc. Neurosci. Abstr. 14: 452                                |
| AY | Benacerraf et al., in Textbook of Immunology (Williams & Wilkins, 1979), pp. 32      |
| AZ | Benfey and Aguayo, 1982, Nature 296: 150-152   |
| BA | Bjorklund and Stenevi, 1979, Physiol. Rev. 59: 62-100                                |
| BB | Boggust et al., 1978, Br. J. Cancer 38 (2): 329-334                                  |

|    |  |
|----|--|
| BC | Boggust et al., 1977, Chem. Abst. <u>90</u> : 66525q   |
| BD | Brecknell et al., 1996, Biol. Rev. 71:227-255.   |
| BE | Bregman <i>et al.</i> , 1995, Nature, Vol. 378, pp. 498-501.   |
| BF | Bregman, 1987, Dev. Brain Res. <u>34</u> : 265-279   |
| BG | Bregman et al., 1996, Soc. Neurosci., Vol. 22, part 1, p. 764.   |
| BH | Brochier, J. et al. 1995, Intl. J. ImmunoPharmacol., 17:41-48.   |
| BI | Brösamle et al., 1996, Society for Neuroscience Abstracts, volume 22, part 2, page 314, Abstract 130.2 |
| BJ | Brösamle et al., 1998, Soc. Neurosci, Vol. 24, part 2, p. 1559.  |
| BK | Brösamle C et al., 1999, Göttingen Neurobiol. Conference 2:833   |
| BL | Buffo A et al., 1999, Soc Neurosci 25(1) 1000 sec 402.1  |
| BM | Cadelli DS, Bandtlow CE, Schwab M.E., 1992, Exp Neurol. 115(1):189-92.                                 |
| BN | Cadelli, D. and Schwab M.E., 1991, Europ. J. Neurosci. 3: 825-832.                                     |
| BO | Cadelli et al., 1991 Experientia 47, A2.   |
| BP | Caputo et al., 1987, Biochem. Pharmacol. <u>36</u> : 995-1002  |
| BQ | Carbonetto et al., 1987, J. Neurosci. <u>7</u> : 610-620   |
| BR | Carlson et al., 1984, J. Cell Biochem. <u>8</u> Part B: 293  |
| BS | Caroni P, Schwab ME., 1988, Neuron 1(1):85-96.   |
| BT | Caroni et al., 1988, Prog. Brain Res. 78:363-70  |
| BU | Caroni et al., 1986, J. Cell Biol. <u>103</u> (5 Part 2): 470A   |
| BV | Caroni et al., in Progress in Brain Research, Vol. 78 (Gash et al, eds.; Elsevier 1988), pp. 363-370   |
| BW | Caroni et al., 1988, Chem. Abst. <u>108</u> : 219574X  |
| BX | Caroni et al., 1988, J. Cell Biol. <u>106</u> : 1281-1288  |
| BY | Caroni and Schwab, 1987, Soc. Neurosci. Abstr. <u>13</u> : 1040  |
| BZ | Caroni et al., 1985, Nature <u>314</u> : 441-443   |
| CA | Caroni et al., 1988, Neuron <u>1</u> : 85-96 ([Conference, March of])                                  |
| CB | Caroni and Schwab, 1987, Experientia <u>43</u> : P 654   |
| CC | Caroni and Schwab, 1989, Dev. Biol. <u>136</u> : 287-295   |
| CD | Caroni et al., 1988, Europ. J. Neurosci., Suppl. 1: 103  |
| CE | Caroni et al., 1988, Soc. Neurosci. Abstr. <u>14</u> : 497   |
| CF | Caroni and Schwab, 1988, Experientia <u>44</u> (Abstr.): A28   |
| CG | Chen MS et al. 1998. Soc. For Neuroscience 24(2): 1766 sec 697.3                                       |
| CH | Chen MS et al. 1999. Soc Neurosci 25(1) 2030, Sec 806.3  |
| CI | Chen et al., 1984, J. Cell Biol. 98:1546-55  |
| CJ | Chen and Chen, 1987, Cell 48:193-203   |
| CK | Chen et al., 1994, Gottingen Neurobiology Conference, Vol. II. P. 905.                                 |
| CL | Chen et al., 2000, Nature, Vol. 403, 27 pages 434-439  |
| CM | Chiquet-Ehrismann et al., 1986, Cell <u>47</u> : 131-139   |
| CN | Chiu et al., 1986, J. Cell Biol. <u>103</u> : 1383-1398  |
| CO | Coleman et al., 1982, J. Cell Biol. <u>95</u> : 598-608  |
| CP | Commissiong, 1984, Neurosci. <u>12</u> : 839-853   |
| CQ | Cornbrooks et al., 1983, Proc. Natl. Acad. Sci. USA <u>80</u> : 3850-3854                              |
| CR | Couch and Strittmatter, 1983, Cell <u>32</u> :257-65   |
| CS | Daniloff et al., 1986, J. Cell Biol. <u>103</u> : 929-945  |
| CT | Dutly and Schwab, 1989, Schweizer Archiv. Neurol. Psych. <u>140</u> : 19-21                            |



|    |  |
|----|--|
| CU | Dutly et al., in Differentiation and Functions of Glial Cells: Proceedings of a Satellite Meeting of the International Society for Neurochemistry held in Rome, Italy, April 19-21, 1989 (G. Levi, ed.; Wiley-Liss, 1990), pp. 149-150 |
| CV | Dyer, 1951, "An Index of Tumor Chemotherapy" pp. 69, National Cancer Institute, National Institutes of Health.   |
| CW | Edelman, 1984, Exp. Cell Res. 161: 1-16  |
| CX | Fischer et al., 1986, J. Neurosci. 6: 605-612  |
| CY | Fouad K et al. 1999. Soc Neurosci 25(1) 226 sec 91.7   |
| CZ | Guenther et al., 1985, EMBO 4:1963-1966  |
| DA | Guenther et al., 1985, Chem. Abst. 103: 270640z  |
| DB | Hammerschlag et al., 1989, J. Neurochem. 52: 268-273   |
| DC | Harris, W.J. et al. 1993. Trends Biotechnol. 11:42-44  |
| DD | Hawkins and Seeds, 1986, Brain Res. 398:63-70  |
| DE | Hird V. et al. 1990. In: Gene & Cancer, Eds. Carney D. & Sikora, K. pp. 183-189.   |
| DF | Hood et al., in Immunology (The Benjamin/Cummings Publishing Company, Inc., 1978) pp. 214-219  |
| DG | Huber A et al. 1999. Göttingen Neurobiol. Conference 2:834   |
| DH | Huber et al. 1998. Soc. For Neuroscience 24(2): 1559 sec 616.6   |
| DI | Huber AB et al. 1999. Soc Neurosci 25(1) 1263 Sec 505.2  |
| DJ | Huber et al., 2000, Biological Chem. Vol. 381, pages 407-419.  |
| DK | Huber et al., 1998, Europ. J. Neurosci Suppl. 10, p. 61.   |
| DL | Johnson et al., 1986, J. Neurosci. 6: 3031-3038  |
| DM | Johnson et al., 1986, Cell 47: 545-554   |
| DN | Kapfhammer et al., 1992, J. Neurosci. 12: 2112-2119.   |
| DO | Kapfhammer, J.P. and Schwab, M.E., 1994, J. Comp Neurol. 340:194-206.  |
| DP | Kapfhammer J.P. and Schwab, M.E., 1992, Soc Neurosci. Abstract, Vol. 18, Part 1, 262.12.   |
| DQ | Kato et al., 1982, Dev. Brain Res. 3: 645-651  |
| DR | Keynes RJ, Cook GM. 1995. Curr Opin Neurobiol. 5(1):75-82.   |
| DS | Kromer et al., 1980, Brain Res vol. 210, p. 153.   |
| DT | Lieberman, et al. 1972. Intl. Review Neurobiology 14:49-124.   |
| DU | Liesi, 1985, EMBO 4: 2505-2511   |
| DV | Liesi, 1985, EMBO 4: 1163-1170   |
| DW | Lindner et al., 1986, Brain Res. 377: 298-304  |
| DX | Mahdavi and Hynes, 1979, Biochim. Biophys. Acta 583:167-78   |
| DY | Mason AJ, Pitts SL, Nikolics K, Szonyi E, Wilcox JN, Seeburg PH, Stewart TA., 1986, Science. 234(4782):1372-8.   |
| DZ | Matrisian et al., 1986, Proc. Natl. Acad. Sci. USA 83:9314-17  |
| EA | McConnell and Berry, 1982, Brain Res. 241: 362-365   |
| EB | Metz et al., 1997, Soc. Neurosci., Vol. 23, part 1, p. 1196.   |
| EC | Mignatti et al., 1986, Tumor invasion through the human amniotic membrane: requirement for a proteinase cascade, Cell 47:487-98  |
| ED | Milstein, in Handbook of Experimental Immunology 4th ed. (Blackwell Scientific Publications, 1986) Chap. 107, pp:107.1-107.13  |
| EE | Mirsky et al., 1986, J. Neurocytol. 15: 799-815  |
| EF | Monard et al., 1983, Prog. Brain Res. 58:359-64  |
| EG | Mullins and Rohrllich, 1983, Biochim. Biophys. Acta 695:177-214  |
| EH | Mundy and Strittmatter, 1985, Cell 40:645-56   |
| EI | Nornes et al., 1983, Cell Tissue Res. 230: 15-35   |
| EJ | Osband ME. et al. 1990. Immunol. today 11:193-195.   |
| EK | Paganetti et al., 1988, J. Cell Biol. 107: 2281-2291   |

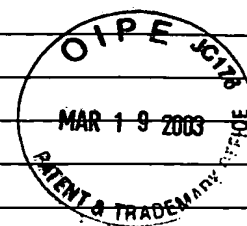


TECH CENTER 1600/2900

MAR 24 2003

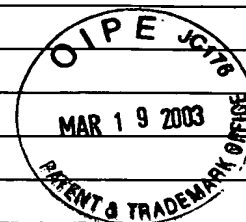
RECEIVED

|    |   |
|----|---|
| EL | Pagnetti and Schwab, 1990, Europ. J. Neurosci. Suppl. 3, 206  |
| EM | Pagnetti and Schwab, 1988, Europ. J. Neurosci., Suppl. 1, p. 240  |
| EN | Pagnetti and Schwab, 1989, Soc. Neurosci. Abstr. 15:507   |
| EO | Pagnetti and Schwab, 1989, J. Neuro-Oncology 7, Suppl., p. 24   |
| EP | Pagnetti et al., 1989, Experientia 45, A30  |
| EQ | Pittman, 1985, Dev. Biol. 110:91-101  |
| ER | Quigley, 1976, J. Cell Biol. 71:472-86  |
| ES | Rainetreau Q et al. 1999. Soc Neurosci 25(1) 2031, Sec 806.14   |
| ET | Readhead et al. 1987. Cell. 48(4):703-12.   |
| EU | Richardson et al., 1984, J. Neurocytol. 13: 165-182   |
| EV | Sakazaki et al., 1983 Brain Res. 262: 125-135   |
| EW | Sanes, 1983, Ann. Rev. Physiol. 45: 581-600   |
| EX | Saneto et al., In Neurochemistry: a practical approach (Turner ed.; IRL Press, 1987) pp. 28-63  |
| EY | Savio and Schwab, 1989, J. Neurosci. 9:1126-1133  |
| EZ | Savio and Schwab, 1988, Neurosci. Lett., Suppl. 33: S172  |
| FA | Savio and Schwab, 1988, Experientia 44 (Abstr.): A27  |
| FB | Savio and Schwab, 1988, Eur. J. Neurosci., Suppl. 1: 207  |
| FC | Savio et al., 1989, Soc. Neurosci. Abstract 15: 317   |
| FD | Schmidt et al., 1991, Soc. Neurosci. Abstract Vol. 17, No. 372.7  |
| FE | Schnell L, and Schwab M.E. 1990. Nature. 343(6255):269-72.  |
| FF | Schnell L, and Schwab ME., 1993, Europ. J. Neurosci 5: 1156-1171  |
| FG | Schnell et al., 1994, Nature 367: 170-173.  |
| FH | Schwab and Caroni, 1986, Neurosci. Lett. 26:S19   |
| FI | Schwab, 1986, Experientia 42: 632   |
| FJ | Schwab, 1991, T. Wiesel et al, eds., Vol. VII, pp. 49-50  |
| FK | Schwab and Caroni, 1986, Soc. Neurosci. 12:12   |
| FL | Schwab and Thoenen, 1985, J. Neurosci. 5: 2415-2423   |
| FM | Schwab, 1990, Ex. Neurol. 109:2-5   |
| FN | Schwab and Savio, 1988, Soc. Neurosci. Abstr. 14: 1200  |
| FO | Schwab et al., 1987, Chem. Abst. 109 : 108200y  |
| FP | Schwab, 1989, I.B.R.O. News 17: 7   |
| FQ | Schwab, 1989, Neurosci Lett., Suppl. 36   |
| FR | Schwab, 1989, Experientia 45(Abstr.): A1  |
| FS | Schwab et al., 1989, J. Neuro-Oncology 7(Suppl.): S26   |
| FT | Schwab et al., 1989, Soc. Neurosci. Abstr. 15: 1106   |
| FU | Schwab et al., 1988, Psychopharmacol. 96 (Suppl.): 15   |
| FV | Schwab and Schnell, 1989, J. Neurocytol. 18: 161-169  |
| FW | Schwab, M., 1988, Publ. (88-30): 63   |
| FX | Schwab et al., 1984, Neurosci. Lett., Suppl. 18: S423   |
| FY | Schwab, 1985, Neurosci. Lett., Suppl. 22: S365  |
| FZ | Schwab and Thoenen, in Experimental Brain Research, Suppl. 13: Process of Recovery From Neural Trauma, International Symposium, Israel, June 1984 (Gilad et al., eds.; Springer-Verlag, 1986) pp. 205-214 |
| GA | Schwab et al., 1988, J. Neurosci. 8: 2381-2393  |
| GB | Schwab et al., 1987, J. Neurochem. 48(Suppl.): S17  |



RECEIVED  
MAR 24 2003  
TECH CENTER 1600/2900

|   |    |  |
|---|----|--|
| ✓ | GC | Schwab et al., 1997, Price et al., eds., J. Wiley & Sons Ltd., Life Sciences. Report LS51, pp. 157-64                |
| ✓ | GD | Schwartz, 1987, CRC Crit. Rev. Biochem. 22: 89-110   |
| ✓ | GE | Schwartz and Spirman, 1982, Proc. Natl. Acad. Sci. USA 79: 6080-6083   |
| ✓ | GF | So and Aguayo, 1985, Brain Res. 328: 349-354   |
| ✓ | GG | Sonnenfeld and Ishii, 1982, J. Neurosci. Res. 8: 375-391   |
| ✓ | GH | Spillmann et al., 1995, NATO ASI Series H92: 23-28.  |
| ✓ | GI | Spillmann et al., 1997 Exp. Neurosci. 9: 549-555   |
| ✓ | GJ | Spillmann et al., 1995, Experientia, Vol. 51, pp. A44.   |
| ✓ | GK | Spillmann et al., 1995, Protein Sci., Vol. 4, Suppl. 1, p. 90.   |
| ✓ | GL | Spillmann et al., 1995, Soc. Neurosci., Vol. 21, part 2, p. 1560.  |
| ✓ | GM | Spillmann, et al., 1996 Soc. Neurosci., Vol. 22, part 1, p. 734.   |
| ✓ | GN | Spillmann et al., 1998, J. Biol. Chem. 273(30):19283-19293   |
| ✓ | GO | Stallcup et al., 1985, J. Neurosci. 5: 1090-1101   |
| ✓ | GP | Tatagiba et al., 1996, Fab. Soc. Neurosci, Vol. 22, p. 315.  |
| ✓ | GQ | Tatagiba et al., 1998, Soc. Neurosci., Vol. 24, part 2, page 1559.   |
| ✓ | GR | Tessier-Lavigne M, Goodman CS. 1996. The molecular biology of axon guidance. Science. 274(5290):1123-33.             |
| ✓ | GS | Thallmair M, Metz GA, Z'Graggen WJ, Raineteau O, Kartje GL, Schwab ME. 1998. Nat Neurosci. 1(2):124-31.              |
| ✓ | GT | Thallmair et al. 1999. Soc Neurosci 25(1) 2029, Sec 806.2  |
| ✓ | GU | Thallmair M et al. 1999. Göttingen Neurobiol. Conference 2:829   |
| ✓ | GV | Thallmair et al., 1997, Soc. Neurosci., Vol. 23, part 1, p. 609.   |
| ✓ | GW | Thoenen et al., In Repair and Regeneration of the Nervous System (Nicholls, ed.; Springer-Verlag, 1982), pp. 173-185 |
| ✓ | GX | Tobey et al., 1985, Exp. Cell Res. 158: 395-412  |
| ✓ | GY | Turner et al., 1983, Dev. Brain Res. 6: 77-83  |
| ✓ | GZ | Tuszynski et al., 1990, Neurosci Vol. 36, pp. 33-44.   |
| ✓ | HA | Van der Haas ME, et al. 1998. Soc. For Neuroscience 24(2): 1559 sec 616.7  |
| ✓ | HB | Van der Haas et al., 1998, Europ. J. Neurosci. Suppl. 10, p. 61.   |
| ✓ | HC | Vanselow et al., 1988, Eur. J. Neurosci., Suppl. 1: 240  |
| ✓ | HD | Weibel et al., 1994, Brain Res. 642: 259-266.  |
| ✓ | HE | Weinberg and Spencer, 1979, Brain Res. 162: 273-279  |
| ✓ | HF | Westall et al., 1978, Proc. Natl. Acad. Sci. USA 75: 4675-4678   |
| ✓ | HG | Wilhelm et al., 1987, Proc. Natl. Acad. Sci. USA 84:6725-29  |
| ✓ | HH | Zagrebelsky et al., 1998, Soc. Neurosci., Vol. 24, part 2, page 1754.  |
| ✓ | HI | Z'Graggen WJ, Metz GA, Kartje GL, Thallmair M, Schwab ME. 1998. J Neurosci. 18(12):4744-57.                          |
| ✓ | HJ | Z'Graggen et al., 1997, Soc. Neurosci, Vol. 23 part 2, p. 1449.  |
| ✓ | HK | Zucker et al., 1985, J Natl Cancer Inst, 75:517-525.   |
| ✓ | HL | Schwab et al. 1990, Soc. For Neurosci. Abstract, Vol. 16, 169.   |
|   |    |  |



RECEIVED

MAR 24 2003

TECH CENTER 1600/2900

EXAMINER

DATE CONSIDERED

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.